### Healthcare Provider: Adult CPR Scenarios—A

**Purpose:** Management of cardiac arrest requiring CPR with bystanders present. The 2nd rescuer arrives with an AED, attaches and operates it, but no shock is advised. So the 1st and 2nd rescuers perform 2-rescuer CPR. After a period of CPR the victim is resuscitated.

**Setup:** Assign 1 participant the role of rescuer, 1 the role of 911\* caller, and 1 the role of the 2nd rescuer. AED use is simulated (2nd rescuer *does not* actually use AED) to provide rescuers with scenarios focusing on 1- and 2-rescuer CPR.

| Scenario   | Scenario Assignments/                       |   | Assessment    |   | <b>Expected Rescuer Actions</b> |  |
|--|---|---|---------------|---|---------------------------------|--|
|  | Discussion                                  |   | Findings      |   |                                 |  |
| 1- and 2-rescuer                                     | First Round                                 | • | Unresponsive  | • | Check for                       |  |
| adult CPR—A  | Rescuer # 1: Participant 1 or 4             |   |               |   | responsiveness (none)           |  |
| Cardiac arrest                                       | 911 call: Participant 2 or 5                |   |               | • | Direct bystander to             |  |
| • Bystander present                                  | Rescuer # 2: Participant 3 or 6             |   |               |   | phone 911*                      |  |
| • First rescuer                                      | You are a physician/nurse/respiratory       | • | Not breathing | • | Check breathing                 |  |
| performs 2<br>cycles of 1-                           | therapist/nurse's aide. A 50-year-old male  |   |               |   | (absent)                        |  |
| rescuer CPR  | has a grand mal seizure and falls to the    |   |               | • | Provide rescue breaths          |  |
| <ul> <li>Second rescuer<br/>attaches and</li> </ul>  | floor in front of you in the clinic waiting |   |               |   | that cause chest rise           |  |
| operates AED   | room.                                       | • | Signs of      | • | Check signs of                  |  |
| (simulated).<br>" <i>No shock</i>                    | You are a physician/nurse/                  |   | circulation   |   | circulation (absent)            |  |
| advised," so   | respiratory therapist/nurse's aide. You are |   | absent        | • | Provide chest                   |  |
| both rescuers<br>perform 2-                          | on duty in the Emergency Department         |   |               |   | compressions                    |  |
| rescuer CPR;   | when a 50-year-old male on a gurney         |   |               | • | Perform 2 cycles of 1-          |  |
| <ul><li>switch twice</li><li>Breathing and</li></ul> | suddenly becomes unresponsive.              |   |               |   | rescuer CPR                     |  |
| circulation  | You are a paramedic/EMT responding to a     |   |               |   |                                 |  |
| return after<br>several cycles                       | call. A 19-year-old college student has     | • | Second        | • | When no shock                   |  |
| j  | been found unresponsive in her dorm room    |   | rescuer       |   | advised by AED,                 |  |
|  | with possible drug overdose.                |   | attaches AED  |   | second rescuer joins            |  |
|  |   |   | (simulate).   |   | with first rescuer to           |  |
|  |   |   | "No shock     |   | perform 2-rescuer CPR           |  |
|  |   |   | advised"      |   | for several cycles (2           |  |
|  |   | • | Signs of      |   | switches)                       |  |
|  |   |   | circulation   | • | Recheck signs of                |  |

| and breathing | circulation (present)      |
|---------------|----------------------------|
| return        | Recheck breathing          |
|               | (present)                  |
|               | Place in recovery          |
|               | position                   |
|               | *Clinic waiting room = 911 |
|               | or clinic emergency        |
|               | number                     |
|               | *Emergency Department =    |
|               | no call needed             |
|               | *Paramedic/EMT= no         |
|               | call needed (call          |
|               | already made)              |
|               |                            |

HCP Adult CPR --A CARD

# Healthcare Provider: Adult Relief of FBAO (Responsive Becomes Unresponsive/Rescue Breathing) Scenarios—A

**Purpose:** Management of FBAO in the adult victim who was responsive and becomes unresponsive (known FBAO). The rescuer sends someone to phone 911. The rescuer must relieve the FBAO and then open the airway, assess breathing, and perform rescue breathing. The victim is resuscitated.

**Setup:** Assign 1 participant the role of rescuer, 1 the role of 911\* caller, and 1 the role of observer.

| Scenario Number  | Scenario Assignments/ Discussion  |   | Findings   |             | <b>Expected Actions</b>  |
|--|---|---|--|-------------|--|
| Adult Unresponsive FBAO—A  Adult foreign- body airway obstruction (responsive becomes unresponsive) with bystanders present FBAO relieved after 2 cycles of abdominal thrusts and finger sweeps Signs of circulation present, but not breathing Rescue breathing continued until vicim regains spontaneous breathing | First Small Group Round Rescuer: Participant 1 or 4 911 call: Participant 2 or 5 Observer: Participant 3 or 6 You are a physician/nurse/ respiratory therapist/nurse's aide. You were performing abdominal thrusts on a responsive coworker in the hospital cafeteria who has become unresponsive. You have placed him supine on the floor. You are a physician/nurse/ respiratory therapist/nurse's aide working in a clinic. You were performing abdominal thrusts on a responsive patient in the waiting room who has become unresponsive. You are a paramedic/EMT. You were performing abdominal thrusts on a responsive 35-year-old male at a fast- food location who now has become unresponsive. | • | Chest does not rise with either rescue breathing attempt  Chest does not rise with either does not rise with either rescue breathing attempt | • • • • • • | Check responsiveness (none)  Send bystander to phone 911*  Open airway with tongue-jaw lift and perform finger sweep Attempt rescue breath (not effective)  Reopen airway (reposition head) and attempt rescue breath (not effective)  Perform up to 5 abdominal thrusts  Repeat steps in bold italics, above  Open airway with tongue-jaw lift, perform finger sweep, foreign body is removed |

|  | • | Chest rises    | •   | Attempt rescue breaths  |
|--|---|----------------|-----|-------------------------|
|  |   | (ventilation   |     | (successful)            |
|  |   | successful)    | •   | Check signs of          |
|  | • | Signs of       |     | circulation (present)   |
|  |   | circulation    | •   | Check breathing         |
|  |   | present        |     | (absent)                |
|  | • | Not breathing  | •   | Continue rescue         |
|  | • | Patient        |     | breathing until victim  |
|  |   | regains        |     | regains spontaneous     |
|  |   | spontaneous    |     | breathing               |
|  |   | breathing      | *91 | 11 CALL                 |
|  |   | after several  | *H  | ospital cafeteria =     |
|  |   | rescue breaths | 1   | nospital code           |
|  |   |                | *C  | linic waiting room =    |
|  |   |                | ġ   | 911 or clinic emergency |
|  |   |                | 1   | number                  |
|  |   |                | *Pa | aramedic/EMT = no       |
|  |   |                | (   | call to 911 needed      |
|  |   |                |     |                         |

HCP-Adult (responsive, unresponsive/rescue breathing) FBAO—A

## Healthcare Provider: Adult Relief of FBAO (Unresponsive/Rescue Breathing) Scenarios—B

**Purpose:** Management of FBAO in the adult found unresponsive from unknown cause with bystanders present. When attempts at rescue breathing fail, the rescuer must recognize the presence of FBAO, relieve the obstruction, and perform rescue breathing. The victim recovers.

**Setup:** Assign 1 participant the role of rescuer, 1 the role of 911\* caller, and 1 the role of observer.

| Scenario Number Scenario Assignments/  | Assessment   | <b>Expected Rescuer Actions</b>   |
|--|--------------|---|
| Discussion   | Findings     |   |
| Unresponsive FBAO—B Foreign-body airway obstruction (found unresponsive) Initial assessment FBAO relieved after 2 cycles of abdominal thrusts and finger sweeps Signs of circulation present, but not breathing  First Round Rescuer: Participant 1 or 4 911 call: Participant 2 or 5 Observer: Participant 3 or 6  You are a physician/nurse/ respiratory therapist/nurse's aide. You discover an unresponsive 45-year-old male on the floor of the bathroom next to the hospital cafeteria.  You are a physician/nurse/ respiratory therapist/nurse's aide working in a clinic. You discover an unresponsive 30-year-old female on the floor of the bathroom.  Extra Practice Scenario  You are a paramedic/EMT. You respond to a call at a restaurant. You find a 47- year-old male unresponsive on the bathroom floor. | Unresponsive | <ul> <li>Check for responsiveness (none)</li> <li>Send bystander to phone 911*</li> <li>Check breathing (absent)</li> <li>Attempt rescue breath (unsuccessful)</li> <li>Reopen airway (reposition head) and attempt rescue breath (unsuccessful)</li> <li>Apply up to 5 abdominal thrusts</li> <li>Open airway with tongue-jaw lift, perform finger sweep</li> <li>Attempt rescue breath, chest does not rise</li> <li>Reopen airway (reposition head) and attempt rescue breath</li> <li>Repeat steps in bold</li> </ul> |

| with breaths  Signs of circulation present  Not breathing  Victim regains spontaneous breathing after several rescue breaths  *Hospital =hospital code *Clinic= 9-1-1 *Paramedic/EMT = no call; 3rd participant observes   | The state of the s |   |                |    |                         |
|--|--|---|----------------|----|-------------------------|
| circulation present  Not breathing  Victim regains spontaneous breathing after several rescue breaths  *Hospital =hospital code *Clinic= 9-1-1 *Paramedic/EMT = no call; 3rd participant   |  |   | with breaths   |    | make chest rise         |
| present Not breathing Victim regains spontaneous breathing after several rescue breaths  *Hospital =hospital code *Clinic= 9-1-1  *Paramedic/EMT = no call; 3rd participant  |  | • | Signs of       | •  | Check signs of          |
| <ul> <li>Not breathing</li> <li>Victim         regains         spontaneous         breathing         after several         rescue breaths         *Hospital =hospital code         *Clinic= 9-1-1         *Paramedic/EMT = no         call; 3rd participant</li> </ul> |  |   | circulation    |    | circulation (present)   |
| <ul> <li>Victim         regains         spontaneous         breathing         after several         rescue breaths         *Hospital =hospital code         *Clinic= 9-1-1         *Paramedic/EMT = no         call; 3rd participant</li> </ul>                        |  |   | present        | •  | Check breathing (not    |
| regains breathing until victim spontaneous begins to breathe breathing after several rescue breaths  *Hospital =hospital code *Clinic= 9-1-1 *Paramedic/EMT = no call; 3rd participant   |  | • | Not breathing  |    | breathing)              |
| spontaneous begins to breathe  breathing after several rescue breaths  *Clinic= 9-1-1  *Paramedic/EMT = no call; 3rd participant   |  | • | Victim         | •  | Continue rescue         |
| breathing after several rescue breaths  *Clinic= 9-1-1 *Paramedic/EMT = no call; 3rd participant   |  |   | regains        |    | breathing until victim  |
| after several rescue breaths  *Hospital =hospital code *Clinic= 9-1-1  *Paramedic/EMT = no call; 3rd participant   |  |   | spontaneous    |    | begins to breathe       |
| rescue breaths  *Clinic= 9-1-1  *Paramedic/EMT = no call; 3rd participant  |  |   | breathing      |    |                         |
| *Paramedic/EMT = no call; 3rd participant  |  |   | after several  | *H | lospital =hospital code |
| call; 3rd participant  |  |   | rescue breaths | *C | linic= 9-1-1            |
|  |  |   |                | *P | aramedic/EMT = no       |
| observes   |  |   |                |    | call; 3rd participant   |
|  |  |   |                |    | observes                |
|  |  |   |                |    |                         |

HCP Adult Unresponsive FBAO/Rescue Breathing—B

# Healthcare Provider: Adult CPR-AED Scenarios—A VF Rhythm: Medication Patch, Return of Signs of Circulation

**Purpose:** Management of cardiac arrest requiring the performance of CPR. The participant must remove a medication patch worn by the victim. After the 4<sup>th</sup> shock the victim is resuscitated.

**Setup:** Before starting the scenario, place a piece of tape or paper that represents a nitroglycerin patch on the chest wall at the location for the right electrode pad. Assign 1 participant the role of AED rescuer, 1 the role of CPR rescuer, and 1 the role of 911\* caller and retriever of the AED (times the collapse-to-shock interval).

| Scenario  | Scenario Assignments/   | Assessment  | <b>Expected Rescuer</b>   |
|---|---|---|---|
|   | Discussion  | Findings  | Actions   |
| AED and CPR—A     Cardiac arrest with medication patch present at site for right electrode pad placement     4-shock scenario (3 shocks, 1 minute of CPR, 1 more shock     Signs of circulation and breathing return after the fourth shock | First Round AED Rescuer: Number 1 or 4 911 call: Number 2 or 5 CPR Rescuer: Number 3 or 6  • You are a physician/nurse/respiratory therapist/nurse's aide. A 79-year-old male you are caring for suddenly clutches his chest and collapses next to you in the hospital medical telemetry unit. Two coworkers are with you; one knows CPR. An AED is at the nursing station down the hall.  • You are a physician/nurse/respiratory therapist/nurse's aide. You are on a medical-surgical floor of the hospital when a 38-year-old male staggers out of a patient room and collapses to the floor in the hallway. Two coworkers are with you; one knows CPR. An AED is at the nursing station. | <ul> <li>Unresponsive</li> <li>Not breathing</li> <li>No signs of circulation</li> <li>AED arrives</li> </ul> | <ul> <li>Check responsiveness (none)</li> <li>Direct bystander to phone 911,* get AED</li> <li>CPR Rescuer: Open airway, assess breathing (none)</li> <li>Provide rescue breaths that cause chest rise</li> <li>Check for signs of circulation (none)</li> <li>Perform chest compressions</li> <li>AED Rescuer: Begin use of AED (POWER ON, begin to apply pads)</li> <li>CPR Rescuer: Stop CPR during AED pad placement</li> </ul> |
|   | You are a paramedic/EMT responding to   |   | • AED Rescuer:  |

| a call with your partner. A 75-year-old |   |               |      | Remove medication        |
|---|---|---------------|------|--------------------------|
| man has collapsed in the movie theater  |   |               |      | patch, wipe skin before  |
| lobby. You have an AED with you.        | • | "Shock        |      | pad placement, apply     |
|   |   | advised" for  |      | pads                     |
|   |   | the first 3   | •    | <b>AED Rescuer:</b>      |
|   |   | shocks        |      | "Clear," analyze—        |
|   |   |               |      | "shock advised"—         |
|   |   |               |      | "clear," shock 3 times   |
|   |   |               |      | as prompted (3 shocks    |
|   |   |               |      | given). Then "clear"     |
|   | • | After 3       |      | and analyze. "No         |
|   |   | shocks, "no   |      | shock advised."          |
|   |   | shock         | •    | CPR Rescuer: Check       |
|   |   | advised." No  |      | signs of circulation     |
|   |   | signs of      |      | (absent). Begin          |
|   |   | circulation   |      | compressions and         |
|   | • | After 1       |      | ventilation (CPR for 1   |
|   |   | minute of     |      | minute)                  |
|   |   | CPR, "no      | •    | <b>AED Rescuer:</b>      |
|   |   | shock         |      | "Clear" and analyze      |
|   |   | advised"      |      | ("no shock advised")     |
|   | • | Signs of      | •    | Check signs of           |
|   |   | circulation   |      | circulation (present)    |
|   |   | and breathing | •    | Check breathing          |
|   |   | return        |      | (present)                |
|   |   |               | *91  | 11 CALL:                 |
|   |   |               | *H   | ospital telemetry unit = |
|   |   |               | hos  | spital emergency         |
|   |   |               | nuı  | mber, get the AED        |
|   |   |               | *C   | linic = hospital         |
|   |   |               | em   | ergency number. get the  |
|   |   |               | AE   | ED                       |
|   |   |               | *Pa  | aramedic/EMT = no call   |
|   |   |               | is r | required                 |

HCP Adult CPR/AED—A

Healthcare Provider: Adult CPR-AED Scenarios—B

VF Rhythm: Loose Electrode Troubleshooting, Respiratory Arrest After

Conversion

**Purpose:** Management of cardiac arrest: poor electrode pad contact and how to correct a poor connection. For variety the instructor can vary the cause from a hairy chest to extreme victim diaphoresis. Reviews what to do when the victim converts to a normal rhythm after 1 shock but remains in respiratory arrest.

**Setup: -** Assign 1 participant the role of AED rescuer, 1 the role of CPR rescuer, and 1 the role of 911\* caller and retriever of the AED (times the collapse-to-shock interval).

| Scenario  | Scenario Assignments/ Discussion  | Assessment Findings   | <b>Expected Rescuer Actions</b>   |
|---|---|---|---|
| Adult CPR and AED—B  Cardiac arrest Poor electrode contact that requires troubleshooting First analysis: "Shock advised" Analysis after that first shock: "No shock advised" Victim has return of signs of circulation, but not breathing |   | <ul> <li>Assessment Findings</li> <li>Unresponsive</li> <li>Not breathing</li> <li>No signs of circulation</li> <li>AED arrives</li> <li>Simulate poor electrode contact; loosen cable or pad; if unable to simulate, tell AED rescuer, "There is an</li> </ul> | <ul> <li>Check responsiveness (none)</li> <li>CPR rescuer: Direct bystander to phone 911* and get the AED</li> <li>Open airway, check breathing (none)</li> <li>Provide breaths that make chest rise</li> <li>Check signs of circulation</li> <li>Provide chest compressions</li> <li>AED rescuer: Begin use of AED (POWER ON, apply pads)</li> <li>CPR Rescuer: Stop CPR during application of AED pads</li> <li>AED Rescuer:</li> </ul> |
|   | collapses to the floor. Two colleagues are with you. An AED is at the reception desk The woman is | electrode  problem; identify  and correct it."  | Successfully troubleshoot poor electrode connection: successful connection is made  |

#### extremely diaphoretic.

- You are a paramedic/EMT. You and your partner are responding to a call at the supermarket. On arrival you find an elderly female collapsed in the aisle. You have an AED with you.. The woman is extremely diaphoretic
- During the loose electrode episode, encourage AED rescuer and 3rd participant to suggest solutions (press down on the pads; check cable connections; comment, "The victim has a very hairy chest" or "is very diaphoretic. What would you do?")
- Reinforce the point that rescue breathing should continue until the airway is stabilized by ACLS. Signs of circulation should be checked every few minutes.

- AED prompt to analyze rhythm
- "Shock advised" following first analysis
- "No shock advised" after the second analysis
- Signs of circulation present
- Not breathing

- AED rescuer: "clear" and analyze—"Shock advised"—"clear", shock
- AED Rescuer: "clear" and analyze: "No shock advised"
- c CPR Rescuer: Check signs of circulation (present)
- Check breathing (absent)
- Continue rescue breathing

#### \*911 Call:

\*Clinic: call emergency number or 911 and get the AED

\*Hospital = call hospital emergency number and get

#### AED

\*Paramedic/EMT= no call needed

HCP Adult CPR/AED—B

### Healthcare Provider: Adult CPR-AED Scenarios—C VF Rhythm: Wet Environment, No Signs of Circulation Return

**Purpose:** Management of cardiac arrest: victim is lying in a wet environment, such as a puddle of water around a swimming pool. Participants should know to remove the victim from standing water and dry the chest. The victim is shocked into asystole ("no shock indicated") after the 3rd shock and remains in asystole ("no shock indicated"), and care is transferred to ACLS personnel. CPR should be performed for 1 minute after each "no shock indicated" message.

**Setup:** Assign 1 participant as an AED rescuer, 1 as a CPR rescuer, and 1 as a 911\* caller and retriever of the AED (or observer). The remaining 3 participants are assigned to the peer practice group.

| Scenario  | Scenario Assignments/  | Assessment Findings                           | <b>Expected Rescuer Actions</b>  |
|---|--|---|--|
| Adult CPR and AED—C   | Discussion  Third Round  AED Rescuer: Number 3 or 6  | Unresponsive                                  | <ul><li>Check response (none)</li><li>CPR Rescuer: Direct</li></ul>  |
| <ul> <li>Cardiac<br/>arrest<br/>following<br/>submersion</li> </ul>   | 911 call: Number 1 or 4 CPR Rescuer: Number 2 or 5   |   | bystander to phone 911* and get the AED  |
| Victim lying     in standing     water;     rescuers     must move    | You are a physician/nurse/respiratory<br>therapist/nurse's aide. You are at the<br>beach when a 20-year-old male   | Not breathing                                 | <ul> <li>Move victim from wet<br/>environment and dry chest<br/>wall</li> <li>Open airway, assess</li> </ul>                                     |
| and dry victim • "Shock advised" for the first 2                      | appears to be panicking in the water.  By the time rescuers get to him he is apparently unresponsive. They bring him to shore. When you and your 2   | No signs of                                   | <ul> <li>Open anway, assess</li> <li>breathing (absent)</li> <li>Provide rescue breaths</li> <li>that make chest rise</li> </ul>                 |
| shocks <i>; "no</i> shock advised" after analysis performed           | colleagues arrive, he is lying on his back with his legs in the water. There is a telephone and AED at the   | circulation                                   | <ul> <li>Check signs of circulation<br/>(absent)</li> <li>Perform chest         <ul> <li>.</li> </ul> </li> </ul>                                |
| following the 3rd shock. "No shock advised" for all additional shocks | <ul> <li>You are a physician/nurse/respiratory therapist/nurse's aide. You are called to the physical rehab swimming pool</li> </ul>   | AED arrives                                   | <ul> <li>AED Rescuer: Begin use of AED (POWER ON, apply pads)</li> </ul>   |
| (CPR indicated)  • ACLS personnel arrive to care for patient          | where there is a senior aerobics class.  When you and 2 associates arrive, staff have just removed an apparently unresponsive 78- year-old female from the water. She is lying in a puddle of water at the side of the | • "Shock advised" for the first 2 shocks. "No | <ul> <li>CPR Rescuer: Stop CPR during application of AED pads</li> <li>AED rescuer: "clear," analyze—"Shock advised"—"clear," shock 3</li> </ul> |

### pool. An AED is in a nearby office.

• You are a paramedic/EMT. You and your partner are responding to a call at the public swimming pool where several people are removing an apparently unresponsive 65-year old female. She is lying at the side of the pool in a puddle of water. You have an AED with you.

- shock advised" after the third shock
- No signs of circulation
- ACLS personnel arrive to care for the victim

- times as prompted (3 shocks given). Then "clear" and analyze. "No shock advised."
- **CPR Rescuer:** Check signs of circulation (absent)
- Resume CPR, re-analyze rhythm every minute
- Transfer care to ACLS personnel

### \* 911 Call:

AED

\*Beach = call 911 and get the AED

\*Swimming pool = call 911 or emergency number and get the

\*Paramedic/EMT= no call required

HCP Adult CPR/AED—C